

REMARKS

Claims 1-77 and 113-140 are pending. Claims 27-35, 48-77 and 113-140 are withdrawn as directed to nonelected subject matter. Claims 6, 8, 10, 12-26, 42-44, 46 and 47 read on the elected species; claims 1-5, 7, 9, 11, 36-41 and 45 are withdrawn as directed to unelected species.

**The Claimed Invention**

In this case, claim 6 requires the elements of (1) an electron conductor, (2) an enzyme capable of reacting with an oxidized form of an electron mediator and a fuel fluid to produce an oxidized form of the fuel fluid and a reduced form of the electron mediator, (3) the reduced form of the electron mediator being capable of releasing electrons to the electron conductor, (4) an enzyme immobilization material immobilizing and stabilizing the enzyme, (5) the enzyme immobilization material being permeable to the fuel fluid, and (6) the stabilized enzyme retaining at least about 75% of its initial catalytic activity for at least about 30 days.

**35 U.S.C. § 102 Rejection over Yamamoto et al.**

The electron mediator (e.g., NADH) disclosed by Yamamoto et al. does not meet the requirement of claim 6 that the reduced form of the electron mediator be capable of releasing electrons to the electron conductor. As demonstrated by the simultaneously submitted declaration of Shelley D. Minteer,<sup>1</sup> the electron mediator NADH can transfer electrons to an electrocatalyst, such as methylene green, and the electrocatalyst in turn can release electrons to the electron conductor, but the reduced form of the electron mediator (e.g., NADH) cannot release electrons directly to the electron conductor as required by part (b) of claim 6.

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<sup>1</sup> Dr. Minteer is an inventor of the claimed technology.

CONCLUSION

Applicant submits that the present application is now in condition for allowance and requests early allowance of the pending claims.

The Commissioner is hereby authorized to charge any under payment or credit any over payment to Deposit Account No. 19-1345.

Respectfully submitted,



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